Nursing, Information and Computer Science: Building Blocks of Nursing Informatics.

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What is Nursing Informatics?

The use of information and technology to communicate, manage knowledge, mitigate error and support decision making (QSEN, XXX)

The science and practice (that) integrates nursing, its information and knowledge, with management of information and communication technologies to promote the health of people, families, and communities worldwide. (IMIA Special Interest Group on Nursing Informatics, 2009)
The Knowledge behind Nursing Informatics

Information Science

Computer Science

Nursing Science
Because ...
What is a knowledge worker?
Nurses as Knowledge Workers

Phenomenology
Nurses as Knowledge Workers

- Phenomenology
- Morality
Nurses as Knowledge Workers

- Phenomenology
- Morality
- Plausibility
Nurses as Knowledge Workers

- Phenomenology
- Morality
- Plausibility
- Preferentiality
Nurses as Knowledge Workers

 Phenomenology
 Morality
 Plausibility
 Preferentiality
 Cognitively
 Affectivity
 KNOWING
So why do we need to integrate informatics?
Nursing Informatics: The Practice

The essence of science

1. Gathering data
2. Analyzing the data
3. Interpreting the findings
4. Applying the conclusions
DIKW Model

- Data
- Information
- Knowledge
- Wisdom
The Scientific Process

Image from http://www.inmagine.com/spl015/spl015616-photo
DIKW Model

Data
DIKW Model

Data

Information

Data
DIKW Model

Knowledge

Information

Data
DIKW Model

- Data
- Information
- Knowledge
- Wisdom
NI competencies for Beginning Nurse

Computer Skills

- Administration
- Communication
- Data access
- Documentation
- Education
- Monitoring
- Basic Desktop Software
- Systems
NI competencies for Beginning Nurse
Informatics Knowledge

✔ Data
✔ Impact
✔ Privacy/security
✔ Systems
Integrating Informatics Competencies into Nursing Education

Essential I: Liberal Education for Baccalaureate Generalist Nursing Practice

A solid base in liberal education provides the cornerstone for the practice and education of nurses.

1. Integrate theories and concepts from liberal education into nursing practice.
2. Synthesize theories and concepts from liberal education to build an understanding of the human experience.
3. Use skills of inquiry, analysis, and information literacy to address practice issues.
4. Use written, verbal, nonverbal, and emerging technology methods to communicate effectively.
5. Apply knowledge of social and cultural factors to the care of diverse populations.
6. Engage in ethical reasoning and actions to provide leadership in promoting advocacy, collaboration, and social justice as a socially responsible citizen.
7. Integrate the knowledge and methods of a variety of disciplines to inform decision making.
8. Demonstrate tolerance for the ambiguity and unpredictability of the world and its effect on the healthcare system.
9. Value the ideal of lifelong learning to support excellence in nursing practice.
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Putting the competencies into the curriculum

Review the essential assigned to your table and identify the criteria that address informatics

Use the matrix to identify which of the competencies fit with the criteria from the essential

Review the course outlines, objectives and assignments in the syllabi brought by members of the group.

Identify strategies that could be used to teach the content in ways that build NI competencies among the students.

Document your ideas on the paper provided to share with the group as a whole
Thank you for participating in this session. If you have outstanding questions please feel free to contact Mary regan@son.umaryland.edu
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